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EXAMINER

WOODS, ERIC V

ART UNIT PAPER NUMBER

2672

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/766,838

Applicant(s)

YABE ET AL.

Examiner

Eric V. Woods

Art Unit

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 August 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

The corrected drawing filed 12 August 2004 as a replacement for Figure 5 is accepted.

The drawings are objected to because Figure 2 runs outside the margins of the page. This drawing is clearly informal, because each element is not in its own box and labeled.

The drawings are objected to under 37 CFR 1.83(b) because they are incomplete. 37 CFR 1.83(b) reads as follows:

When the invention consists of an improvement on an old machine the drawing must when possible exhibit, in one or more views, the improved portion itself, disconnected from the old structure, and also in another view, so much only of the old structure as will suffice to show the connection of the invention therewith.

Specifically, with respect to Figure 1, the specification on page 4, line 8 clearly states that the data display device outputs data to a screen. Therefore, the screen must be shown. Even on page 5 of the specification, output unit 12 is stated to be a "means on which various data are output". The specification never distinctly states that output unit 12 is a display.

Further, Figure 1 does not show the memory that is stated to be part of the controller on page 6, line 2.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Finally, examiner strongly suggests to applicant that applicant submit color drawings, at least for Figure 5. It is extremely difficult to determine what elements are and are not present in this image, and in black and white it is very difficult to discern each element and all the features that applicant claims are shown in the drawing. Such things as broken lines and the like are very difficult to see if not illegible. Examiner would also suggest showing a version of the drawing that takes up the entire page so that details are clearer. Applicant is reminded that such submission should be accompanied by a petition under 37 CFR 1.84(a)(2) and the appropriate fee.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "Screen Object Appearance Control and Changing Method."

Examiner notes that since the apparatus are computer-implemented, the use of the word "Method" is sufficient to convey to a user that an apparatus (e.g. a computer programmed to execute such a method) and a computer program (e.g. a computer program on computer readable media for making a computer execute such a method) exist.

35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms that are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are: "data display ways", "a common way", "predetermined data display way", et cetera.

The specification appears to be a direct translation of a foreign document and has numerous grammatical errors.

One specific example can be pointed out by examining the first paragraph of the specification. **Appropriate revision is required.**

The first sentence uses the terms "a data display device that on a screen displays data display" – first of all, correction idiomatic English would have this section

read “a data display device that display data on a screen”; secondly, “displays data display” is redundant and the last word “display” therein has no grammatical purpose – it is not a subject, object, or any other part of speech in that sentence; thirdly, there should be some form of punctuation, either a semicolon or a period after the term ‘cannot’, with examiner recommending that the sentence be ended there (such that it would read “text alone cannot. It relates more particularly to a ...”)

Other examples:

- Page 1, line 13: “display data display ...” – same redundant wording;
- Page 1, line 17: “devices display collection ...” – this should read, “devices display a collection ...”;
- Page 1, line 17: “...digital values as ...” – this should read, “digital values such as ...”;
- Page 1, line 24, “...due to opaqueness at the overlapped ...” – this should read, “.... opaqueness of the overlapped ...”;

Et cetera. There are many usages of an inappropriate preposition.

The specification is objected to because of 37 CFR 1.56 and MPEP 2004. Applicant has at least one relevant copending application having common assignees and inventive entities (specifically, application 10/766859) that was filed on the same date, and has not disclosed its existence. Applicant is **required** to amend the first sentence of the specification to include its existence. Examiner **must** be aware of all relevant copending applications in order to properly make double patenting determination, and according to MPEP 2004 applicant is required to make examiner

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aware of such applications, and clearly an application filed on the same day having the same assignee with common inventive entities (Misawa, Makoto) qualifies as such a relevant copending application.

The specification is further objected to because it does not clarify if the internal memory of the controller 14 (as described on page 6, lines 2-4) is RAM and/or the nature of the memory 13 shown in Figure 1. It would appear to examiner that "memory" 13 is really persistent storage (network storage, hard drive, CD-ROM, etc) while the RAM of the computer system is the internal memory of controller 14, but examiner has no way of knowing this. Appropriate correction is required.

Lastly, the specification is objected to because the added material that references Figure 5 does not provide a summary of what Figure 5 is, other than a brief nod to it showing the various claimed features of the invention and a legend explaining the map symbols. Some brief explanation of the relevance of the Figure to the invention is required.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 6, and 7 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 8, and 9 of copending Application No. 10/766,859.

<p>Claim 1, present application:</p> <p>A data display device comprising:</p> <ul style="list-style-type: none">-An appearance characteristic obtaining unit that obtains appearance characteristic of each of data objects that are displayed on a screen by similar data display ways, the data objects representing pieces of information to be displayed on the screen respectively; and-A display control unit that changes appearance of at least one of the data objects so that the at least one of the data objects is displayed in a distinct appearance, depending on the appearance characteristic obtained.	<p>Claim 1, 10/766,859:</p> <p>An object display device comprising:</p> <ul style="list-style-type: none">-A visibility determining unit that determines whether a first object to be handled on a screen hides a second object that has been displayed on the screen; and-An appearance changing unit that changes, depending on determination by the visibility determining unit, appearance of the first object so that the second object becomes visible.
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This is a provisional obviousness-type double patenting rejection because both applications are still pending. Specifically, applicant's specification in the instant application lists visibility (e.g. transparency / alpha value) as an appearance characteristic that can be altered. Clearly, the objects shown in Figure 5 of the instant application are overlaid on each other, and transparency is changed to make them more visible with respect to each other (Figures 3 and 4 and the specification generally). Therefore, the visibility determination unit of application 10/766,859 could be the "appearance characteristic obtaining unit" of the instant application, where both appearance characteristic and visibility could constitute alpha values.

The display control unit of claim 1 of the instant application that changes the appearance (e.g. alpha, transparency, see Figures 4 and 5) is comparable to the "appearance changing unit" of the '859 application. Clearly, changing alpha / transparency would render the second object visible.

Finally, claims 1, 6, and 7 of the instant application are apparatus, method, and computer program all performing the same steps, and thusly are comparable to each other and are obvious over claims 1, 8, and 9 of the '859 application, which are similarly method, apparatus, and computer program product.

Examiner recommends that applicant file a terminal disclaimer to overcome these ODP type rejections. An example of a terminal disclaimer is provided below.

Terminal Disclaimer

Examples of acceptable language for making the disclaimer of the terminal portion of any patent granted on the subject application follow:

I. If a Provisional Obviousness-Type Double Patenting Rejection Over A Pending Application was made, use:

The owner, _____, of _____ percent interest in the instant application hereby disclaims the terminal part of the statutory term of any patent granted on the instant application which would extend beyond the expiration date of the full statutory term of any patent granted on pending **reference** Application Number _____, filed on _____, as such term is defined in 35 U.S.C. 154 and 173, and as the term of any patent granted on said **reference** application may be shortened by any terminal disclaimer filed prior to the grant of any patent on the pending **reference** application. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and any patent granted on the **reference** application are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.

II. If an Obviousness-Type Double Patenting Rejection Over A Prior Patent was made, use:

The owner, _____, of _____ percent interest in the instant application hereby disclaims the terminal part of the statutory term of any patent granted on the instant application which would extend beyond the expiration date of the full statutory term of **prior patent** No. _____ as the term of said **prior patent** is defined in 35 U.S.C. 154 and 173, and as the term of said **prior patent** is presently shortened by any terminal disclaimer. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and the **prior patent** are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.

Alternatively, Form PTO/SB/25 may be used for situation I, and Form PTO/SB/26 may be used for situation II; a copy of each form may be found at the end MPEP § 1490.

Claim Objections

Claim 1 is objected to because of the following informalities:

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1. On line 2, the phrase "each of data objects" is used. Correct idiomatic English would be "each of the data objects" or "each data object" or the like, and other informalities as noted in the rejections under 35 U.S.C. 112, second paragraph, below.

Appropriate correction of claims 6 and 7 is also required.

Claim Rejections - 35 UC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 6 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, the method is computer implemented, but the preamble does not state this. Therefore, the claim is not enabled. This rejection can be overcome by amending the preamble to read "A computer-implemented data display method comprising:"

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "data display ways" is unclear and must be replaced with some term that is more definite.

The term "appearance" is relative and unclear. It is unclear what an "appearance characteristic" is.

In claim 1, the term "respectively" is used, where it is unknown what applicant intends this to mean. Is applicant requiring that the data display objects be listed or displayed in some hierarchy or order? If so, the claim needs to be amended to include this limitation.

Further, the term "appearance" in the second half of claim 1 is incorrect both because it should read "...a appearance" and because it lacks antecedent basis. Examiner believes applicant intends that term to read "appearance characteristic".

Claims 6 and 7 suffer the same deficiencies.

Claims 2-5 are rejected for not correcting the deficiencies of their parent claim(s).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brunner.

Claims 1, 6, and 7 are apparatus, method, and computer program product all performing the same steps. Since they are all implemented on a general-purpose general computer, the claims are all appropriately subject to the same rejection, since the scope is precisely the same.

As to claims 1, 6, and 7,

A data display device comprising:

- An appearance characteristic obtaining unit that obtains appearance characteristic of each of data objects that are displayed on a screen by similar data display ways, the data objects representing pieces of information to be displayed on the screen respectively; and
- A display control unit that changes appearance of at least one of the data objects so that the at least one of the data objects is displayed in a distinct appearance, depending on the appearance characteristic obtained.

Brunner teaches a system that obtains the transparency of various layers on a computer display (that is, layers that have varying alpha values, see for example Figure 2 where various items (for example, menus and cursors) are shown (2:15-30). The display is divided into tiles (as in Figures 4 and 5), but this is incidental. The important thing to note here is that each tile is composed of a plurality of layers (2:14-51), and that such layers are composited with each other. In 3:48-4:45, it is taught that in Figure 2 such objects can have fade values and alpha values such that transparent menu effects

(4:37-44) and the like can be achieved. Clearly, objects on each layer have transparency, so the **similar data display ways** of the claim would either constitute objects in the same tile or on the same layer, depending on the interpretation of the claim. Clearly in the flowchart of Figure 7, the alpha values of the present layer are obtained. This clearly constitutes "obtaining appearance characteristic", and since such objects are displayed on the screen, that portion of the limitations is met.

The display control unit clearly determines if any layer has changed position and or opacity, for example (2:15-45), particularly (9:55-10:35), where it is taught that applications request changes in their transparency, window ordering, or the like, where this would clearly constitute "changing appearance of at least one of the data objects" such that it received shadows, glow, or some other visual effect (e.g. 2:43-51), where these data objects on each layer (as in objects 103a-103c in Figure 3) can have these effects added, where such effects or differences in transparency would clearly constitute "changing the appearance characteristic" giving such an object a "distinct appearance", as applicant's specification is clearly drawn to the fact that such changes may be in fill color, transparency, or the like as in Figure 5 of the instant specification.

Thusly, Brunner teaches all of the limitations of the claim.

Claims 2-4 are rejected under 35 U.S.C. 103(a) as unpatentable over Brunner in view of Sakomoto et al (US 2005/0052462 A1).

As to claim 2, Brunner does not specifically teach that a fill object, but Brunner at least suggests such by teaching that shadows, glow effects, and transparency may be varied by an application, which would at least suggest such. In the interests of

expediting prosecution, Sakomoto teaches that it is well known in the art to vary color of objects on a map to emphasize them and to make them more visible [0023]. Changing the color of an object is equivalent to changing its graphical fill, as the term "fill" is well known in the art to mean filling an object with a color. It would be obvious to apply the techniques of Sakomoto to that of Brunner, since Brunner applies such to menus and obviously changing the color of an object is simply one form of highlighting or emphasis, and clearly the maps of Sakomoto could be processed in the system of Brunner with each layer (car location, streets, etc) being composited together at some desired transparency ([0023-0025, 0193-0199]), etc.

As to claim 3, Sakomoto clearly teaches in Figures 14, 16, 23, and the like as a "plot diagram", where such is equivalent to a map (see applicant's own Figure 5). Motivation and combination is incorporated from the rejection to claim 2.

As to claim 4, Brunner does not teach this limitation, but Sakomoto clearly teaches a "line contour object", e.g. the road in Figure 6 and in [0023]. Motivation and combination is incorporated from the rejection to claim 2.

Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as unpatentable over Brunner in view of McQuarrie et al (US 6,658,375 B1).

As to claims 3 and 5, Brunner does not expressly teach these limitations. McQuarrie clearly teaches the output of various simulations as being output as a plot output, and further as a vector map overlaid onto a contour plot and a plot diagram generally (Figures 5-8c, and 24:55-25:11), where these are clearly well known forms in which data could be output. Clearly, when a vector plot is overlaid onto a contour plot, it

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would be desirable that the contour map not be occluded by the vector map, with one method of doing this obviously being the transparent layers of Brunner, where the vector map could easily be made partially transparent (25:10-40, where layers are overlaid), and where Brunner (2:30-61) clearly teaches the other limitations of this particular claim, where Brunner suggests varying the transparency between layers to make menus and other elements more visible and better to understand along with adding effects, and that is well known in the art, as noted in Sakomoto above.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric V. Woods whose telephone number is 571-272-7775. The examiner can normally be reached on M-F 7:30-4:30 alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 571-272-7664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Eric Woods


JEFFERY J. ORRER
PRIMARY EXAMINER

September 27, 2005